PATENT COOPERATION TREATY



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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

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| INTERNAT | IONAL PRELIMINARY RI (Chapter II of the Patent Co | EPORT ON PATENTABILITY coperation Treaty) | | |
| | (PCT Article 36 and | i Rule 70) | | |
| Applicant's or agent's file reference F0302PCT | FOR FURTHER ACTION | See Form PCT/IPEA/416 | | |
| International application No. PCT/JP2003/004706 | International filing date (day) 14 April 2003 (14.0 | | | |
| International Patent Classification (IPC) o A61K 7/06 | r national classification and IPC | | | |
| Applicant | SHIN-ETSU CHEMICA | L CO., LTD. | | |
| This report is the international preliminary examination report, established by this International Preliminary Examin Authority under Article 35 and transmitted to the applicant according to Article 36. | | | | |
| sheets of the dand/or sheets of Administrative sheets which sheets whi | escription, claims and/or drawing containing rectifications authorized Instructions). supersede earlier sheets, but whice sclosure in the international appliabox. stional Bureau only) a total of | sheets, as follows: s which have been amended and are the basis of the dother by this Authority (see Rule 70.16 and Section 60 in this Authority considers contain an amendment to cation as filed, as indicated in item 4 of Box No. If | | |
| Administrative Instruc | s indicated in the Supplemental tions). | sequence listing and/or tables related thereto, in c Box Relating to Sequence Listing (see Section 80 | | |
| Box No. I Basis of the Box No. II Priority Box No. III Non-estable Box No. IV Lack of un Box No. V Reasoned so citations ar Box No. VI Certain does Box No. VII Certain determined by the company of th | e report lishment of opinion with regard to ity of invention | on | | |
| Date of submission of the demand | Date | of completion of this report | | |
| 12 November 2004 (1 | 2.11.2004) | 03 March 2005 (03.03.2005) | | |
| Name and mailing address of the IPEA/J | JP Auth | orized officer | | |
| Facsimile No. | , m. | phone No. | | |

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2003/004706

| Box N | lo. I | Basis of the report | | | | | |
|--|---|---|--|--|--|--|--|
| | 1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item. | | | | | | |
| | This report is based on translations from the original language into the following language, which is language of a translation fyrnished for the purpose of: | | | | | | |
| | international search (under Rules 12.3 and 23.1(b)) | | | | | | |
| | Ħ | publication of the international application (under Rule 12.4) | | | | | |
| | international preliminary examination (under Rules 55.2 and/or 55.3) | | | | | | |
| | modulational promining community (under Nation 2010) | | | | | | |
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| | With regard to the elements of the international application, this report is based on (replacement sheets which have been | | | | | | |
| | furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report): | | | | | | |
| \boxtimes | The international application as originally filed/furnished | | | | | | |
| | the description: | | | | | | |
| | page | , as originally filed/furnished | | | | | |
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| | ased | nence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing. | | | | | |
| | _ | \ | | | | | |
| 3. 🗌 | The | mendments have resulted in the cancellation of: | | | | | |
| | | the description, pages | | | | | |
| | | the claims, Nos. | | | | | |
| | the drawings, sheets/figs | | | | | | |
| | | the sequence listing (specify): | | | | | |
| any table(s) related to sequence listing (specify): | | | | | | | |
| | | \ | | | | | |
| 4 |] This | report has been established as if (some of) the amendments annexed to this report and listed below had not been | | | | | |
| made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental | | | | | | | |
| | (Rul | 70.2(c)). | | | | | |
| | <u> </u> | the description, pages | | | | | |
| the claims, Nos. | | | | | | | |
| the drawings, sheets/figs | | | | | | | |
| the sequence listing (specify): | | | | | | | |
| | | any table(s) related to sequence listing (specify): | | | | | |
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| * If i | # If item 4 applies, some or all of those sheets may be marked "superseded." The item 4 applies is a superseded in the item 4 applies in the item 4 applies is a superseded in the item 4 applies in the item 4 applies is a superseded in the item 4 applies in the i | | | | | | |
| | D COTTO | SAMOO (Pay No. D. Garger, 2004) | | | | | |

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP03/04706

| Box No. V Reasoned statement citations and explana | ed statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; s and explanations supporting such statement | | | | | | |
|--|--|--------|-------|--|--|--|--|
| 1. Statement | | | | | | | |
| Novelty (N) | Claims | 1-28 , | YES | | | | |
| | Claims | | NO | | | | |
| Inventive step (IS) Industrial applicability (IA) | Claims | 1-28 | YES | | | | |
| | Claims | | NO NO | | | | |
| | Claims | 1-28 | YES | | | | |
| | Claims | | NO NO | | | | |
| 2. Citations and explanations (Rule 7 | 0.70 | | | | | | |

2. Citations and explanations (Rule 70.7)

The ISR cites the following documents 1-3.

Document 1: WO, 2002-100356, A1 (Shin-Etsu Chemical Co., Ltd.)

Document 2: WO, 98-54255, A1 (Shiseido Co., Ltd.)

Document 3: JP, 4-321618, A (Osaka Organic Chemical Industry Ltd.)

Document 1 discloses an acryl-silicone-based copolymer having the same hydrolyzable silyl group as that of the present application, but the said copolymer is used as a surface treating agent for cosmetic powders and is not intended for being directly mixed in a hair cosmetic. Furthermore, since the powder treated on its surface with the said copolymer is heat-treated, it is considered that the properties of the copolymer are changed.

Therefore, the subject matters of claims 1-28 of the present application appear to be novel and to involve an inventive step in view of document 1.

Documents 2 and 3 respectively disclose that a copolymer with an acrylic monomer containing a hydrolyzable silyl group as a comonomer has been mixed as a hair cosmetic ingredient, but neither disclose nor suggest the mixing of the acryl-silicone-based copolymer of the present application.

Therefore, the subject matters of claims 1-28 of the present application appear to be novel and to involve an inventive step in view of documents 2 and 3.